UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/703,687	11/02/2000	Koji Nakagiri	862.C2039	2907

5514 7590 05/05/2004

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER	
TRAN, DOUGLAS Q	

ART UNIT	PAPER NUMBER
2624	

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/703,687	Applicant(s) NAKAGIRI ET AL.	
	Examiner Douglas Q. Tran	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-24 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-24 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 11/02/00 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 7.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Munetomo et al. (US Patent No. 6,661,530 B1) in view of Tonkin (US Patent No. 6,134,568).

As to claim 1, Munetomo teaches a preview image display method displaying a print preview image (fig. 43 indicates display preview 43-4 for displaying the layout preview image 43-3 of the document data and print setting data 43-1), the preview image display locates in a print control apparatus (i.e., a computer 1-1 "fig. 1 or fig. 2" comprises a print preview processor "2-13 in fig. 2 or 42-3 in fig. 42" for displaying the preview image at a display device 42-6 in fig. 42; col. 24, lines 29-33) having a document-binding print function for printing a document formed by stacking document-binding unit composed of a designated number of sheets (the document data created for printing and stored in the printing data memory 8-6 of the application 8-1 of the computer "fig. 8; col. 24, lines 48-49". The order pages of the print document in a

form of binding unit composed of a designated number of sheets which is previewed in figures 44 and 45; col. 24, lines 58-60 and 64-66), the preview image display method comprising:

a rendering step (i.e., 43-3 in fig. 43) of laying out pages in an order after document-binding and rendering images of the pages when document-binding print is designated (step of 43-2 and col. 24, lines 54-60 indicate that the preview data development unit 42-5 for reading the print document "col. 24, lines 47-52" and developing the preview image data; then the preview screen layout unit 42-4 for rendering by generating screen layout data adapted to the double-sided printing mode. Thus, the laying out pages of the print document with double sided printing mode setting in an order and images of the pages in the designated form of the document-binding are rendered and previewed on the screen in figures 44, 45, col. 24, lines 64-66); and

a displaying step (i.e., 43-4 in fig. 43) of displaying the images of the pages rendered in the rendering step as preview images (the display preview step "43-4 in fig. 43" indicates the previewing images of pages, which are rendered by the preview screen layout unit 42-4 in step 43-3, is displayed in figures 44, and 45).

However, Munetomo does not explicitly teach the document binding in the form of bookbinding is rendered for previewing, in which the book formed by stacking multiple bookbinding units composed of a designated number of sheets folded once.

Tonkin, in the same field of endeavor "previewing process", teaches the document-binding in the form of bookbinding is rendered for previewing, in which the book formed by stacking multiple bookbinding units composed of a designated number of sheets folded once (col. 8, lines 49-52 describes that the document such as a book formed by stacking multiple bookbinding units including number of pages folded once such as the covers, printed pages and

tab pages which is generated and rendered to the window for previewing "col. 12, lines 35-52"; figures 8A, B, C, D, and E indicate one typical image of the bookbinding is displayed for previewing. However, the book can be bound by other types of binding and the folding would be specified by the user "col. 7, lines 39-42 and 53-54").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the rendering step in Munetomo of rendering the image of the document in the form of bookbinding for previewing as taught by Tonkin. The suggestion for modifying the rendering step in Munetomo can be reasoned by one of ordinary skill in the art as set forth above by Tonkin because the modified rendering step would increase the advantage of the printing system for previewing the details of the images of the assembled book in which the book can be specified and virtually prior to physical assembly of the book.

As to claim 2, Munetomo and Tonkin disclose every feature discussed in claim 1, and Tonkin further teaches of the rendering step includes a step of rendering while dividing pages in units of bookbinding units (col. 8, lines 49-52 describes that the bookbinding units including dividing pages in units such as the units of the covers, printed pages and tab pages are generated and displayed to the user for previewing "col. 12, lines 40-52").

As to claim 3, Munetomo and Tonkin discloses every feature discussed in claim 1, and Munetomo further teaches of the rendering step includes a step of laying out pages in a designated open direction (fig. 44 and 45 have "page forward" and "page back" icons for open page by page of the document from right to left or left to right "col. 25, lines 1-3").

As to claim 4, Munetomo and Tonkin disclose every feature discussed in claim 3, and Munetomo further teaches the rendering step includes a step of rendering while dividing pages

into pairs of pages each of which forms a spread after bookbinding (in a case of a document after binding contains only five pages, five pages are divided into pairs of pages, for example, a pair of pages 0 and 1, a pair of pages 2 and 3, and a pair of pages 4 and 5; each of which forms a spread "please see the typical pair of pages 2 and 3 forms a spread in fig. 45").

As to claim 5, Munetomo and Tonkin disclose every feature discussed in claim 3, and Munetomo further teaches when one of right and left open directions is designated as the open direction (fig. 44 and 45 have "page forward" and "page back" icons for open page by page of the document from right to left or left to right "col. 25, lines 1-3"), pages are rendered with pages that form spreads being located at neighboring positions in the designated direction (fig. 45 indicates the typical pages 2 and 3 are rendered with pages that form spreads in the order in the designated direction).

As to claim 6, Munetomo and Tonkin disclose every feature discussed in claim 3, and Munetomo further teaches when a top open direction is designated as the open direction (col. 24, line 66 to col. 25, line 1 describes if the top binding is designated as the up and down open direction), pages are rendered with pages (the pages 2 and 3) that form spreads being located at vertically neighboring positions "please see the typical figure 47").

As to claim 7, Munetomo and Tonkin disclose every feature discussed in claim 1, and Munetomo further teaches a page number rendering step of rendering page numbers of the pages in corresponding with the rendered pages (fig. 44 and 45 indicates the order of page numbers, for example, "page 1" in fig. 44, "page 2" and "page 3" in fig. 45" are rendered below the rendered pages).

As to claim 8, Munetomo and Tonkin disclose every feature discussed in claim 1, and Tonkin further Tonkin teaches print control apparatus further has an insert function of inserting a cover page, and the rendering step includes a step of rendering a frame of the cover page to be inserted in the order after bookbinding when cover page insertion is designated (col. 8, lines 49-53 describes the bookbinding is created including the inserted front cover 431 and the back cover 435; and fig. 8A indicates the frame of a front cover is rendered "col. 12, lines 28-30", and fig. 8E indicates a frame of the back cover is rendered "col. 12, lines 59-60").

As to claim 9, Munetomo teaches a print control apparatus (i.e., a computer 1-1 in fig. 1) generating print data to be sent to a printer (i.e., 1-4 in fig. 1; col. 8, lines 6-9) and having a document-binding print function for printing a document formed by stacking document-binding unit composed of a designated number of sheets (the document data created for printing and stored in the printing data memory 8-6 of the application 8-1 of the computer "fig. 8; col. 24, lines 48-49". The order pages of the print document in a form of binding unit composed of a designated number of sheets which is previewed in figures 44 and 45; col. 24, lines 58-60 and 64-66), comprising:

a rendering unit (i.e., a preview screen layout unit 42-4 in fig. 42) for laying out pages in an order after document-binding and rendering images of the pages when document-binding print is designated (the preview screen layout unit 42-4 for rendering by generating screen layout data adapted to the double-sided printing mode. Thus, the laying out pages of the print document with double sided printing mode setting in an order and images of the pages in the designated form of the document-binding are rendered and previewed on the screen in figures 44, 45, col. 24, lines 64-66); and

a displaying unit (42-6 in fig. 42) for displaying the images of the pages rendered in the rendering means as preview images (the display preview "43-4 in fig. 43" indicates the previewing images of pages, which are rendered by the preview screen layout unit 42-4 in step 43-3, is displayed on figures 44, and 45).

However, Munetomo does not explicitly teach the document binding in a form of bookbinding is rendered for previewing, in which the book formed by stacking multiple bookbinding units composed of a designated number of sheets folded once.

Tonkin, in the same field of endeavor "previewing process", teaches the document-binding in the form of bookbinding is rendered for previewing, in which the book formed by stacking multiple bookbinding units composed of a designated number of sheets folded once (col. 8, lines 49-52 describes that the document such as a book formed by stacking multiple bookbinding units including number of pages folded once such as the covers, printed pages and tab pages which is generated and rendered to the window for previewing "col. 12, lines 35-52"; figures 8A, B, C, D, and E indicate one typical image of the bookbinding is displayed for previewing. However, the book can be bound by other types of binding and the folding would be specified by the user "col. 7, lines 39-42 and 53-54").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the rendering unit in Munetomo to render the image of the document in the form of bookbinding for previewing as taught by Tonkin. The suggestion for modifying the rendering unit in Munetomo can be reasoned by one of ordinary skill in the art as set forth above by Tonkin because the modified rendering unit would increase the advantage of

the printing system for previewing the details of the images of the assembled book in which the book can be specified and virtually prior to physical assembly of the book.

As to claim 10, Munetomo and Tonkin disclose every feature discussed in claim 9, and Tonkin further teaches the rendering unit renders while dividing pages in units of bookbinding units (col. 8, lines 49-52 describes that the bookbinding units including dividing pages in units such as the covers, printed pages and tab pages are generated and displayed to the user for previewing "col. 12, lines 40-52").

As to claim 11, Munetomo and Tonkin discloses every feature discussed in claim 9, and Munetomo further teaches the rendering unit lays out pages in a designated open direction (fig. 44 and 45 have "page forward" and "page back" icons for open page by page of the document from right to left or left to right "col. 25, lines 1-3").

As to claim 12, Munetomo and Tonkin disclose every feature discussed in claim 11, and Munetomo further teaches the rendering unit renders while dividing pages into pairs of pages each of which forms a spread after bookbinding (in a case of a document contains only five pages, pages is divided into pairs of pages and each of which forms a spread "please see the typical pair of pages 2 and 3 forms a spread in fig. 45").

As to claim 13, Munetomo and Tonkin disclose every feature discussed in claim 11, and Munetomo further teaches when one of right and left open directions is designated as the open direction (fig. 44 and 45 have "page forward" and "page back" icons for open page by page of the document from right to left or left to right "col. 25, lines 1-3"), pages are rendered with pages that form spreads being located at neighboring positions in the designated direction (fig. 45

indicates the typical pages 2 and 3 are rendered with pages that form spreads in the order in the designated direction).

As to claim 14, Munetomo and Tonkin disclose every feature discussed in claim 11, and Munetomo further teaches when a top open direction is designated as the open direction (col. 24, line 66 to col. 25, line 1 describes if the top binding is designated as the up and down open direction), pages are rendered with pages (the pages 2 and 3) that form spreads being located at vertically neighboring positions "please see the typical figure 47").

As to claim 15, Munetomo and Tonkin disclose every feature discussed in claim 9, and Munetomo further teaches the rendering unit also renders page numbers of the pages in corresponding with the rendered pages (fig. 44 and 45 indicates the order of page numbers "i.e., page 1 ¼ in fig. 44, or page 2 2/5 in fig. 45" is rendered below the rendered pages).

As to claim 16, Munetomo and Tonkin disclose every feature discussed in claim 9, and Tonkin further Tonkin teaches print control apparatus further has an insert function of inserting a cover page, and the rendering unit renders a frame of the cover page to be inserted in the order after bookbinding when cover page insertion is designated (col. 8, lines 49-53 describes the bookbinding is created including the inserted front cover 431 and the back cover 435; and fig. 8A indicates the frame of a front cover is rendered "col. 12, lines 28-30", and fig. 8E indicates a frame of the back cover is rendered "col. 12, lines 59-60").

As to claim 17, Munetomo teaches a storage medium (i.e., the memory 1-11 in fig. 2) that stores a computer program (col. 8, lines 13-15) for making a print control apparatus (i.e., a computer 1-1 in fig. 1) generate print data to be sent to a printer (i.e., 1-4 in fig. 1, col. 8, lines 6-9) and display a print preview image (i.e., 43-4 in fig. 43 for displaying the preview image at a

display device 42-6 in fig. 42; col. 24, lines 29-33), a print control apparatus having a document-binding print function for printing a document formed by stacking document-binding unit composed of a designated number of sheets (the document data created for printing and stored in the printing data memory 8-6 of the application 8-1 of the computer "fig. 8; col. 24, lines 48-49". The order pages of the print document in a form of binding unit composed of a designated number of sheets which is previewed in figures 44 and 45, col. 24, lines 58-60 and 64-66), the preview image display method comprising:

a program code of the rendering step (i.e., 43-3 in fig. 43) of laying out pages in an order after document-binding and rendering images of the pages when document-binding print is designated (step of 43-2 and col. 24, lines 54-60 indicate that the preview data development unit 42-5 for reading the print document and developing the preview image data; then the preview screen layout unit 42-4 for rendering by generating screen layout data adapted to the double-sided printing mode. Thus, the laying out pages of the print document with double sided printing mode setting in an order and images of the pages in the designated form of the document-binding are rendered and previewed on the screen in figures 44, 45, col. 24, lines 64-66); and

a program code of the displaying step (i.e., 43-4 in fig. 43) of displaying the images of the pages rendered in the rendering step as preview images (the display preview step "43-4 in fig. 43" indicates the previewing images of pages, which are rendered by the preview screen layout unit 42-4 in step 43-3, is displayed on figures 44, and 45).

However, Munetomo does not explicitly teach the document binding in a form of bookbinding is rendered for previewing, in which the book formed by stacking multiple bookbinding units composed of a designated number of sheets folded once.

Tonkin, in the same field of endeavor "previewing process", teaches the document-binding in the form of bookbinding is rendered for previewing, in which the book formed by stacking multiple bookbinding units composed of a designated number of sheets folded once (col. 8, lines 49-52 describes that the document such as a book formed by stacking multiple bookbinding units including number of pages folded once such as the covers, printed pages and tab pages which is generated and rendered to the window for previewing "col. 12, lines 35-52"; figures 8A, B, C, D, and E indicate one typical image of the bookbinding is displayed for previewing. However, the book can be bound by other types of binding and the folding can be specified by the user "col. 7, lines 39-42 and 53-54").

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the rendering process in Munetomo of rendering the image of the document in the form of bookbinding for previewing as taught by Tonkin. The suggestion for modifying the rendering process in Munetomo can be reasoned by one of ordinary skill in the art as set forth above by Tonkin because the modified rendering process would increase the advantage of the printing system for previewing the details of the images of the assembled book in which the book can be specified and virtually prior to physical assembly of the book.

As to claim 18, Munetomo and Tonkin disclose every feature discussed in claim 17, and Tonkin further teaches the rendering step includes the step of rendering while dividing pages in units of bookbinding units (col. 8, lines 49-52 describes that the bookbinding units including dividing pages in units such as the covers, printed pages and tab pages are generated and displayed to the user for previewing "col. 12, lines 40-52").

As to claim 19, Munetomo and Tonkin discloses every feature discussed in claim 17, and Munetomo further teaches the rendering step includes the step of laying out pages in a designated open direction (fig. 44 and 45 have "page forward" and "page back" icons for open page by page of the document from right to left or left to right "col. 25, lines 1-3").

As to claim 20, Munetomo and Tonkin disclose every feature discussed in claim 19, and Munetomo further teaches the rendering step includes the step of rendering while dividing pages into pairs of pages each of which forms a spread after bookbinding (in a case of a document contains only five pages, pages is divided into pairs of pages and each of which forms a spread "please see the typical pair of pages 2 and 3 in fig. 45").

As to claim 21, Munetomo and Tonkin disclose every feature discussed in claim 19, and Munetomo further teaches when one of right and left open directions is designated as the open direction (fig. 44 and 45 have "page forward" and "page back" icons for open page by page of the document from right to left or left to right "col. 25, lines 1-3"), pages are rendered with pages that form spreads being located at neighboring positions in the designated direction (fig. 45 indicates the typical pages 2 and 3 are rendered with pages that form spreads in the order in the designated direction).

As to claim 22, Munetomo and Tonkin disclose every feature discussed in claim 19, and Munetomo further teaches when a top open direction is designated as the open direction (col. 24, line 66 to col. 25, line 1 describes if the top binding is designated as the up and down open direction), pages are rendered with pages (the pages 2 and 3) that form spreads being located at vertically neighboring positions "please see the typical figure 47").

As to claim 23, Munetomo and Tonkin disclose every feature discussed in claim 17, and Munetomo further teaches a page number rendering step of rendering page numbers of the pages in corresponding with the rendered pages (fig. 44 and 45 indicates the order of page numbers "i.e., page 1 ¼ in fig. 44, or page 2 2/5 in fig. 45" is rendered below the rendered pages).

As to claim 24, Munetomo and Tonkin disclose every feature discussed in claim 17, and Tonkin further Tonkin teaches print control apparatus further has an insert function of inserting a cover page, and the rendering step includes a step of rendering a frame of the cover page to be inserted in the order after bookbinding when cover page insertion is designated (col. 8, lines 49-53 describes the bookbinding is created including the inserted front cover 431 and the back cover 435; and fig. 8A indicates the frame of a front cover is rendered "col. 12, lines 28-30", and fig. 8E indicates a frame of the back cover is rendered "col. 12, lines 59-60").

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on paper # 6 filed on 7/16/02 including the U. S. applications: 09/703,692 and 09/703,628. The submission is in compliance with the provisions of 37 CFR 1.97 and 1.98. Accordingly, the information disclosure statement is being considered by the examiner.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (703) 305-4857 or E-mail address is Douglas.tran@uspto.gov.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Douglas Q. Tran
Apr. 22, 2004